

CLAIMS

We Claim

1. A method for treating a patient with a inflammatory neurological disorder, comprising administering to a patient a compound selected from the group consisting of (a) a polypeptide comprising the amino acid sequence BX7B which binds HA; (b) an antibody which binds one of domains D1, D2, D3, D4, or, D5 of RHAMM; (c) a polypeptide fragment which encodes a D1, D2, D3, D4, or, D5 domain of RHAMM; and (d) a gene delivery vector which expresses antisense RHAMM, or, delivers and expresses any one of (a), (b), or (c), such that said inflammatory neurological disorder is treated.
2. The method according to claim 1 wherein said inflammatory neurological disorder is Parkinsons disease.
3. The method according to claim 1 wherein said inflammatory neurological disorder is Alzheimer disease
4. A method for treating a patient with arthritis, comprising administering to a patient a compound selected from the group consisting of (a) a polypeptide comprising the amino acid sequence BX7B which binds HA; (b) an antibody which binds one of domains D1, D2, D3, D4, or, D5 of RHAMM; (c) a polypeptide fragment which encodes a D1, D2, D3, D4, or, D5 domain of RHAMM; and (d) a gene delivery vector which expresses antisense RHAMM, or, delivers and expresses any one of (a), (b), or (c), such that said arthritis is treated.

5. The method according to claim 4 wherein said arthritis is rheumatoid arthritis.

6. The method according to claim 4 wherein said arthritis is osteoarthritis.

7. A method for treating a patient with multiple sclerosis, comprising administering to a patient a compound selected from the group consisting of (a) a polypeptide comprising the amino acid sequence BX7B which binds HA; (b) an antibody which binds one of domains D1, D2, D3, D4, or, D5 of RHAMM; (c) a polypeptide fragment which encodes a D1, D2, D3, D4, or, D5 domain of RHAMM; and (d) a gene delivery vector which expresses antisense RHAMM, or, delivers and expresses any one of (a), (b), or (c), such that said multiple sclerosis is treated.

8. A method for treating a patient with inflammatory dermatosis, comprising administering to a patient a compound selected from the group consisting of (a) a polypeptide comprising the amino acid sequence BX7B which binds HA; (b) an antibody which binds one of domains D1, D2, D3, D4, or, D5 of RHAMM; (c) a polypeptide fragment which encodes a D1, D2, D3, D4, or, D5 domain of RHAMM; and (d) a gene delivery vector which expresses antisense RHAMM, or, delivers and expresses any one of (a), (b), or (c), such that said inflammatory dermatitis is treated.

9. The method according to claim 8 wherein said inflammatory dermatosis is psoriasis.

10. A method for treating a patient with inflammatory bowel disease, comprising administering to a patient a compound selected from the group consisting of (a) a polypeptide comprising the amino acid sequence BX7B which binds HA; (b) an antibody which binds one of domains D1, D2, D3, D4, or, D5 of RHAMM; (c) a polypeptide fragment which encodes a D1, D2, D3, D4, or, D5 domain of RHAMM; and (d) a gene delivery vector which expresses antisense RHAMM, or, delivers and expresses any one of (a), (b), or (c), such that said inflammatory bowel disease is treated.

11. A method for treating wounds, comprising administering to a patient a compound selected from the group consisting of (a) a polypeptide comprising the amino acid sequence BX7B which binds HA; (b) an antibody which binds one of domains D1, D2, D3, D4, or, D5 of RHAMM; (c) a polypeptide fragment which encodes a D1, D2, D3, D4, or, D5 domain of RHAMM; and (d) a gene delivery vector which expresses antisense RHAMM, or, delivers and expresses any one of (a), (b), or (c), such that said wound is treated.

12. The method according to claim 11 wherein said wound is a surgical excision.

13. The method according to claim 11 wherein said method is utilized to prevent a surgical adhesion.

14. The method according to claim 11 wherein said method is utilized to prevent a scar.

15. A method for treating stenosis or restenosis, comprising administering to a patient a compound selected from the group consisting of (a) a polypeptide comprising the amino acid sequence BX7B which binds HA; (b) an antibody which binds one of domains D1, D2, D3, D4, or, D5 of RHAMM; (c) a polypeptide fragment which encodes a D1, D2, D3, D4, or, D5 domain of RHAMM; and (d) a gene delivery vector which expresses antisense RHAMM, or, delivers and expresses any one of (a), (b), or (c), such that said stenosis or restenosis is treated.
16. The method according to claim 15, wherein said compound is administered through a balloon catheter.
17. The method according to claim 15 wherein said compound is applied to a stent, which is placed in said patient.
18. The method according to claim 15, wherein said compound is administered to the outside to the vessel to be treated.
19. A method for treating cancer, comprising administering to a patient a compound selected from the group consisting of (a) a polypeptide comprising the amino acid sequence BX7B which binds HA; (b) an antibody which binds one of domains D1, D2, D3, D4, or, D5 of RHAMM; (c) a polypeptide fragment which encodes a D1, D2, D3, D4, or, D5 domain of RHAMM; and (d) a gene delivery vector which expresses antisense RHAMM, or, delivers and expresses any one of (a), (b), or (c), such that said cancer is treated.
20. A method for treating kidney fibrosis, comprising administering to a

patient a compound selected from the group consisting of (a) a polypeptide comprising the amino acid sequence BX7B which binds HA; (b) an antibody which binds one of domains D1, D2, D3, D4, or, D5 of RHAMM; (c) a polypeptide fragment which encodes a D1, D2, D3, D4, or, D5 domain of RHAMM; and (d) a gene delivery vector which expresses antisense RHAMM, or, delivers and expresses any one of (a), (b), or (c), such that said kidney fibrosis is treated.

21. A method for treating inflammatory lung disease, comprising administering to a patient a compound selected from the group consisting of (a) a polypeptide comprising the amino acid sequence BX7B which binds HA; (b) an antibody which binds one of domains D1, D2, D3, D4, or, D5 of RHAMM; (c) a polypeptide fragment which encodes a D1, D2, D3, D4, or, D5 domain of RHAMM; and (d) a gene delivery vector which expresses antisense RHAMM, or, delivers and expresses any one of (a), (b), or (c), such that said inflammatory lung disease is treated.
22. The method according to claim 21 wherein said inflammatory lung disease is emphysema.
23. The method according to claim 21 wherein said inflammatory lung disease is asthma.
24. The method according to claim 21 wherein said inflammatory lung disease is cystic fibrosis.
25. A method for treating obesity and obesity related diseases, comprising

administering to a patient a compound selected from the group consisting of (a) a polypeptide comprising the amino acid sequence BX7B which binds HA; (b) an antibody which binds one of domains D1, D2, D3, D4, or, D5 of RHAMM; (c) a polypeptide fragment which encodes a D1, D2, D3, D4, or, D5 domain of RHAMM; and (d) a gene delivery vector which expresses antisense RHAMM, or, delivers and expresses any one of (a), (b), or (c), such that said obesity and obesity-related diseases are treated.

~~26~~ A method for treating lupus, comprising administering to a patient a compound selected from the group consisting of (a) a polypeptide comprising the amino acid sequence BX7B which binds HA; (b) an antibody which binds one of domains D1, D2, D3, D4, or, D5 of RHAMM; (c) a polypeptide fragment which encodes a D1, D2, D3, D4, or, D5 domain of RHAMM; and (d) a gene delivery vector which expresses antisense RHAMM, or, delivers and expresses any one of (a), (b), or (c), such that said lupus is treated.

~~27~~ A method for treating cardiovascular disease, comprising administering to a patient a compound selected from the group consisting of (a) a polypeptide comprising the amino acid sequence BX7B which binds HA; (b) an antibody which binds one of domains D1, D2, D3, D4, or, D5 of RHAMM; (c) a polypeptide fragment which encodes a D1, D2, D3, D4, or, D5 domain of RHAMM; and (d) a gene delivery vector which expresses antisense RHAMM, or, delivers and expresses any one of (a), (b), or (c), such that said cardiovascular disease is treated.

28. The method according to claim 27 wherein said cardiovascular disease

is atherosclerosis.

- ~~29.~~ An antibody which binds to any one of domains D1, D2, D3, D4, or, D5 of RHAMM.
30. The antibody according to claim 29 wherein said RHAMM is human RHAMM.
31. The antibody according to claim 29 wherein said antibody is a monoclonal antibody.
32. The antibody according to claim 31 wherein said monoclonal antibody is a human monoclonal antibody.
33. The antibody according to claim 31 wherein said monoclonal antibody is an Fab fragment of an antibody.
- ~~34.~~ A polypeptide fragment comprising all or a portion of domains D1, D2, D3, D4, or, D5 of RHAMM, wherein said polypeptide is less than 73kD molecular weight.
35. The polypeptide fragment according to claim 34, wherein said polypeptide is less than 100 amino acids in length.
36. The polypeptide fragment according to claim 34 wherein said polypeptide fragment is less than 75 amino acids in length.
- ~~37.~~ A method for treating or preventing diabetes mellitus, comprising administering to a patient a compound selected from the group

consisting of (a) a polypeptide comprising the amino acid sequence BX7B (SEQ ID NO:28); (b) an antibody which binds one of domains D1, D2, D3, D4, or D5 of RHAMM; (c) a peptide of less than 95 kD or 73 kd, comprising all or a portion of domains D1, D2, D3, D4, or, D5 of RHAMM; and (d) a gene delivery vector which expresses antisense RHAMM, or, delivers and expresses any one of (a), (b), or (c), such that the disease is treated.

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